

PRODUCT PERFORMANCE / EFFICACY REVIEW

Mark Suarez, Entomologist - IB

DATE: 14 June 2007

EPA REG. NUMBER: 279-3240

PRODUCT NAME: Lawn Insect Control

REGISTRANT: FMC Corp. – Agricultural Products Group

PM: George LaRocca, PM 13
REVIEWER: BeWanda Alexander

DECISION #: 369501
DP BARCODE: 338481

ACTION: R34

ACTIVE INGREDIENT(S): 128825, Bifenthrin.....0.115%

TYPE: Granular

OPPTS GUIDELINE(S): 810.1000
810.3000
810.3500

MRID: 47086001

GLP ?: No.

SITES: Outdoor.

PESTS: Ants (Carpenter, Pharaoh, Fire, and Harvester), Centipedes, Chiggers, Fleas, Scorpions, Spiders, Ticks

STUDY APPLICATION RATE: 4 lbs/1000 ft²

LABEL APPLICATION RATE: 1 to 4 lbs/1000 ft²

STUDY SUMMARY(IES):

MRID 46566201. Sommer, WT (2007) Residual Control of Bifenthrin Granules. Unpublished report prepared by FMC Corporation. 98 p.

The MRID contains a response/rebuttal to comments provided in a previous efficacy review (dated 10 January 2007). In said DER a number of deficiencies were noted. The registrant has addressed those issues point-by-point. For ease of review, each point is discussed independently below. The original comments are in normal text, the registrant's response is *italicized*, and any subsequent comments are **bolded**.

ENTOMOLOGIST'S COMMENTS AND RECOMMENDATIONS

The submitted data are not adequate to validate the 3 month residual claims conditionally accepted on 25 January 2005. Remove all residual claims from the product label. Residual claims may be submitted on a subsequent label, accompanied by supporting data. The main reasons are listed below:

1. The only public health pest for which field data were provided was an unspecified harvester ant species (*Pogonomyrmex* sp.).
The harvester ant was identified as Pogonomyrmex californicus. Additional data were cited in support of the Dermacentor variabilis and Loxosceles reclusa.

The information provided about the species of harvester ant is acceptable.

The data cited for support of 3 month residual claims against additional species are unacceptable. The data cited and submitted indicate that the product remains effective against fire ants, *Solenopsis invicta*, American dog ticks, and brown recluse spiders for up to 3 months, when applied at a rate of 0.2 lb ai/A. However, this exceeds the maximum label rate of the subject formulation (0.1 lb ai/A).

2. The design of the field trial was deficient.
 - a. Insufficient detail was provided about the experimental conditions, if the treatment plots were subject to weathering, and what those conditions were.
The registrant provided detailed weathering information.
The additional meteorological data are acceptable.
 - b. The plots were soil only, not grass.
The registrant has provided an explanation for choosing plots designed in this manner. In essence, the registrant argues that due to increased exposure to UV radiation and lack of organic matter onto which to bind.

Although the registrant's points may be valid, the removal of a dimension from the architectural complexity of the habitat is probably more important.

- c. The plots were set up in such a way that the movement of pesticide out of the plot would be restricted.

The registrant countered by saying that the movement of the a.i. within the plots would be similar to that in turf applications.

The position of the registrant was not supported by data.

- d. The highest label rate listed was used, not the lowest (1 lb/1000 ft²).

The season long control claim is applicable to only the highest label rate (4 lb/1000 ft² or approximately 0.2 lb ai/A).

The 3 month residual claim is acceptable, if it is clearly stated that it applies only to the pest species for which data have been provided (i.e.,) and only at the 4 lb/1000 ft² application rate.

3. Laboratory trials are not adequate to support this type of claim (i.e., outdoor use residual).

The registrant argued that MRID 46566201 included data demonstrating a strong correlation between laboratory trials and field trials.

The data in MRID 46566201

4. The mound treatment for fire ants study should follow-the 810.3100 guideline.

Enclosure

002517-00150, -00151-ER